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TIM4 Rabbit pAb

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Catalog # AP94008

Product Information

Application	WB
Primary Accession	Q6U7R4
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37548
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse TIM4
Epitope Specificity	221-320/374
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein (Potential).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The T cell immunoglobulin and mucin domain containing protein (TIM) family encodes cell surface receptors that are involved in the regulation of T helper (Th) -1 and -2 cell-mediated immunity. Studies have shown that TIM 4, which is preferentially expressed on macrophages and dendritic cells, is the natural ligand of TIM 1, and that this binding leads to T-cell expansion and cytokine production. Unlike other members of the TIM family, TIM 4 lacks a putative tyrosine phosphorylation signal sequence in its intracellular domain. The TIM 4 gene maps to a locus associated with predisposition to asthma in both mice and humans and with its connection to TIM 1-triggered Th2 responsiveness, may be considered as a candidate disease/predisposition gene for asthma.

Additional Information

Gene ID	276891
Other Names	T-cell immunoglobulin and mucin domain-containing protein 4, TIMD-4, Spleen, mucin-containing, knockout of lymphotoxin protein, SMUCKLER, T-cell immunoglobulin mucin receptor 4, TIM-4, T-cell membrane protein 4, Timd4, Tim4
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

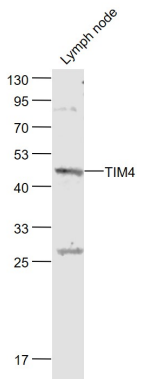
Protein Information

Name	Timd4
Synonyms	Tim4
Function	Phosphatidylserine receptor that plays different role in immune response including phagocytosis of apoptotic cells and T-cell regulation (PubMed:17960135, PubMed:18354194, PubMed:18367551, PubMed:20368430). Involved in efferocytosis, the process by which apoptotic cells are removed by phagocytic cells by promoting the engulfment of apoptotic cells or exogenous particles (PubMed:17960135, PubMed:20368430). Mechanistically, acts by securing apoptotic cells to phagocytes through direct binding to phosphatidylserine present on apoptotic cells, while other engulfment receptors such as MERTK efficiently recognize apoptotic cells and mediate their ingestion (PubMed:17960135). Controls T-cell activation in a bimodal fashion, decreasing the activation of naive T-cells by inducing cell cycle arrest, while increasing proliferation of activated T-cells by activating AKT1 and ERK1/2 phosphorylations and subsequent signaling pathways (PubMed:18354194, PubMed:18367551). Also promotes autophagy process by suppressing NLRP3 inflammasome activity via activation of LKB1/PRKAA1 pathway in a phosphatidylserine-dependent mechanism (PubMed:31263038).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q96H15}; Single-pass type I membrane protein
Tissue Location	Predominantly expressed in lymphoid tissues, such as spleen, lymph nodes, and Peyer patches (PubMed:14768054, PubMed:17960135). Also expressed in fetal liver, salivary gland, and spleen stromal cells, predominantly in the marginal zone and to a lesser extent throughout the white pulp (PubMed:14768054, PubMed:17960135). Not expressed in bone marrow-derived cells (PubMed:14768054, PubMed:17960135). Expressed mainly by antigen presenting cells (APCs) in T- and B-cell areas, but not by T- or B- lymphocytes (PubMed:18354194, PubMed:20368430)

Background

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Images



Sample:
Lymph node (Mouse) Lysate at 40 ug
Primary: Anti- TIM4 (AP94008) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 42 kD
Observed band size: 45 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.